



# **Certificate of Analysis**

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Product Name: DDR1-IN-1 Catalog No.: 5077 Batch No.: 2

CAS Number: 1780303-76-5

IUPAC Name: N-[3-[(2,3-Dihydro-2-oxo-1*H*-indol-5-yl)oxy]-4-methylphenyl]-4-[(4-ethyl-1-piperazinyl)methyl]-3-(trifluoromethyl)

benzamide dihydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{30}H_{31}F_3N_4O_3.2HCl.\frac{1}{2}H_2O$ 

**Batch Molecular Weight:** 634.52

Physical Appearance: Cream solid
Solubility: water to 100 mM

DMSO to 50 mM

Storage: Desiccate at RT

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.17$  (Dichloromethane:Methanol [4:1])

**HPLC:** Shows 98.0% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 56.79 5.4 8.83 Found 56.64 5.26 8.75

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



# **Product Information**

Print Date: Jun 12th 2019

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#### **Description:**

Selective discoidin domain receptor 1 (DDR1) tyrosine kinase inhibitor (IC $_{50}$  values are 105 and 413 nM for DDR1 and DDR2 respectively). Inhibits integrin-induced DDR1 autophosphorylation in an osteosarcoma cell line.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>30</sub>H<sub>31</sub>F<sub>3</sub>N<sub>4</sub>O<sub>3</sub>.2HCl.½H<sub>2</sub>O

Batch Molecular Weight: 634.52 Physical Appearance: Cream solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

Storage: Desiccate at RT

# Solubility & Usage Info:

water to 100 mM DMSO to 50 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

Canning et al (2014) Structural Mechanisms Determining Inhibition of the Collagen Receptor DDR1 by Selective and Multi-Targeted Type II Kinase Inhibitors. J.Mol.Biol. 426 2457. PMID: 24768818.

Kim et al (2013) Discovery of a potent and selective DDR1 receptor tyrosine kinase inhibitor. ACS.Chem.Biol. 8 2145. PMID: 23899692.